**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**AU4: HW #2 – Solving Systems Algebraically – set them equal & substitution**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Graph the system of equations, find the solution.**

**1.**  **2.** Confirm the answer algebraically:





**Solve the system of equations algebraically, find the solution.**

**3.**  **4.** 

**4.** Suppose a video store charges nonmembers $4 to rent each video. A store membership costs $21 and members pay only $2.50 to rent each video. For what number of videos is the cost the same?

**5.** Suppose your club is selling candles to raise money. It costs $100 to rent a booth from which to sell the candles. If the candles cost your club $1 each and are sold for $5 each, how many candles must be sold to equal your expenses?

**6.**  **7.** 

**8.**  **9.** 

**Spiral:**

**10.** Which number is in the solution set of the inequality ?

(1) 9 (3) 7

(2) 8 (4) 6

**11.** Which value of *y* is in the solution set of the inequality ?

(1) 0 (3) -1

(2) -2 (4) 2

**12.**  or 

